Roll No. .

Total No. of Questions – **7**

Total No. of Printed Pages – **8**

Time Allowed – **3** Hours

Maximum Marks – **100**

KJN

Answers are to be given only in English except in the case of the candidates who have opted for Hindi Medium. If a candidate has not opted for Hindi Medium his / her answers in Hindi will not be valued.

Question No. **1** is compulsory.

Attempt any **five** questions from the remaining **six** questions.

Working notes should form part of the answers.

Marks

1. Answer the following : **4×5 =20**

(a) Primex Limited produces product 'P'. It uses annually 60,000 units of a material 'Rex' costing ₹ 10 per unit. Other relevant information are :

Cost of placing an order	:	₹ 800 per order
Carrying cost	:	15% per annum of average inventory
Re-order period	:	10 days
Safety stock	:	600 units

The company operates 300 days in a year.

You are required to calculate :

(i) Economic Order Quantity for material 'Rex'.

(ii) Re-order Level

(iii) Maximum Stock Level

(iv) Average Stock Level

Marks

(b) Journalise the following transactions assuming cost and financial accounts are integrated :

			₹
(i)	Materials issued :		
		Direct	3,25,000
		Indirect	1,15,000
(ii)	Allocation of wages (25% indirect)		6,50,000
(iii)	Under/Over absorbed overheads :		
		Factory (Over)	2,50,000
		Administration (Under)	1,75,000
(iv)	Payment to Sundry Creditors		1,50,000
(v)	Collection from Sundry Debtors		2,00,000

(c) Calculate the degree of operating leverage, degree of financial leverage and the degree of combined leverage for the following firms :

		N	S	D
Production (in units)		17,500	6,700	31,800
Fixed costs	₹	4,00,000	3,50,000	2,50,000
Interest on loan	₹	1,25,000	75,000	Nil
Selling price per unit	₹	85	130	37
Variable cost per unit	₹	38.00	42.50	12.00

1/2 (d) X Ltd. is considering the following two alternative financing plans :

	Plan – I ₹	Plan – II ₹
Equity shares of ₹ 10 each	4,00,000	4,00,000
12% Debentures	2,00,000	–
Preference Shares of ₹ 100 each	–	2,00,000
₹	**6,00,000**	**6,00,000**

The indifference point between the plans is ₹ 2,40,000. Corporate tax rate is 30%. Calculate the rate of dividend on preference shares.

Marks

2. (a) The following information relates to a bus operator : 8

Cost of the bus	₹	18,00,000
Insurance charges		3% p.a.
Manager-cum accountant's salary	₹	8,000 p.m.
Annual Tax	₹	50,000
Garage Rent	₹	2,500 p.m.
Annual repair & maintenance	₹	1,50,000
Expected life of the bus		15 years
Scrap value at the end of 15 years	₹	1,20,000
Driver's salary	₹	15,000 p.m.
Conductor's salary	₹	12,000 p.m.
Stationery	₹	500 p.m.
Engine oil, lubricants (for 1200 kms.)	₹	2,500
Diesel and oil (for 10 kms.)	₹	52
Commission to driver and conductor (shared equally)		10% of collections
Route distance		20 km long

The bus will make 3 round trips for carrying on the average 40 passengers in each trip. Assume 15% profit on collections. The bus will work on the average 25 days in a month.

Calculate fare for passenger-km.

(b) The assets of SONA Ltd. consist of fixed assets and current assets, while its current liabilities comprise bank credit in the ratio of 2 : 1. You are required to prepare the Balance Sheet of the company as on 31st March 2013 with the help of following information : 8

1/2

Share Capital	–	₹ 5,75,000
Working capital (CA-CL)	–	₹ 1,50,000
Gross Margin	–	25%

Marks

Inventory Turnover	–	5 times
Average Collection Period	–	1.5 months
Current Ratio	–	1.5 : 1
Quick Ratio	–	0.8 : 1
Reserves & Surplus to Bank & Cash	–	4 times

3. (a) The rate of change of labour force in a company during the year ending 31st March, 2013 was calculated as 13%, 8% and 5% respectively under 'Flux Method', 'Replacement method' and 'Separation method'. The number of workers separated during the year is 40. **8**

You are required to calculate :

(i) Average number of workers on roll. 800

(ii) Number of workers replaced during the year. 64

(iii) Number of new accessions i.e. new recruitment. 104

(iv) Number of workers at the beginning of the year. 748

(b) APZ Limited is considering to select a machine between two machines 'A' and 'B'. The two machines have identical capacity, do exactly the same job, but designed differently. **8**

Machine 'A' costs ₹ 8,00,000, having useful life of three years. It costs ₹ 1,30,000 per year to run.

Machine 'B' is an economy model costing ₹ 6,00,000, having useful life of two years. It costs ₹ 2,50,000 per year to run.

The cash flows of machine 'A' and 'B' are real cash flows. The costs are forecasted in rupees of constant purchasing power. Ignore taxes.

The opportunity cost of capital is 10%.

Marks

The present value factors at 10% are :

Year	t_1	t_2	t_3
$PVIF_{0.10.t}$	0.9091	0.8264	0.7513
$PVIFA_{0.10.2} = 1.7355$			
$PVIFA_{0.10.3} = 2.4868$			

Which machine would you recommend the company to buy ?

4. (a) SP Limited produces a product 'Tempex' which is sold in a 10 Kg. packet. **8**
The standard cost card per packet of 'Tempex' are as follows :

	₹
Direct materials 10 kg @ ₹ 45 per kg	450
Direct labour 8 hours @ ₹ 50 per hour	400
Variable Overhead 8 hours @ ₹ 10 per hour	80
Fixed Overhead	200
	1,130

Budgeted output for the third quarter of a year was 10,000 Kg. Actual output is 9,000 Kg.

Actual cost for this quarter are as follows :

	₹
Direct Materials 8,900 Kg @ ₹ 46 per Kg.	4,09,400
Direct Labour 7,000 hours @ ₹ 52 per hour	3,64,000
Variable Overhead incurred	72,500
Fixed Overhead incurred	1,92,000

You are required to calculate :

(i) Material Usage Variance 4500 F

(ii) Material Price Variance 8900 A

(iii) Material Cost Variance 4400 A

Marks

(iv) Labour Efficiency Variance 1000 F

(v) Labour Rate Variance 14000 A

(vi) Labour Cost Variance 4000 A

(vii) Variable Overhead Cost Variance 5000 A

(viii) Fixed Overhead Cost Variance 12000 A

(b) The following are the summarized Balance Sheet of Flexon Limited as on 31st March 2012 and 2013 : **8**

Liabilities	31-3-12 ₹	31-3-13 ₹	Assets	31-3-12 ₹	31-3-13 ₹
Share Capital	8,00,000	8,00,000	Goodwill	15,000	15,000
General Reserve	1,40,000	1,80,000	Building	4,00,000	3,60,000
Profit & Loss A/c.	1,60,000	2,70,000	Plant	3,70,000	5,20,000
Sundry Creditors	1,71,000	1,67,000	Investment (Long-term)	1,20,000	1,50,000
Bills Payable	20,000	30,000	Stock	3,00,000	2,30,000
Provision for Tax	1,60,000	1,80,000	Debtors	1,80,000	2,00,000
			Cash & Bank	66,000	1,52,000
	14,51,000	**16,27,000**		**14,51,000**	**16,27,000**

Additional Information :

(1) Depreciation charged during the year 2012-13 :

On Plant – ₹ 40,000

On Building – ₹ 40,000

(2) Provision for tax of ₹ 1,90,000 was made during the year 2012-13.

(3) Interim dividend paid during the year 2012-13 :

Interim Dividend – ₹ 80,000

Corporate Dividend Tax – ₹ 13,596

Prepare :

(i) Statement of changes in working capital

(ii) Funds flow statement for the year ended 31st March, 2013.

Marks

5. (a) Explain the following terms in relation to process costing : 4×4 =16

(i) Equivalent Production

(ii) Inter-process profit

(b) Elaborate the practical application of Marginal Costing.

(c) What is Virtual Banking ? State its advantages.

(d) What is Overcapitalisation ? State its causes and consequences.

6. (a) Calculate Machine Hour Rate from the following particulars : 8

Cost of Machine	–	₹ 25,00,000
Salvage Value	–	₹ 1,25,000
Estimated life of the machine	–	25,000 Hours
Working Hours (per annum)	–	3,000 Hours
Hours required for maintenance	–	400 Hours
Setting-up time required	–	8% of actual working hours

Additional Information :

(i) Power 25 units @ ₹ 5 per unit per hour.

(ii) Cost of repairs and maintenance ₹ 26,000 per annum.

(iii) Chemicals required for operating the machine ₹ 2,600 per month.

(iv) Overheads chargeable to the machine ₹ 18,000 per month.

(v) Insurance Premium (per annum) 2% of the cost of machine

(vi) No. of operators – 02 (looking after three other machines also)

(vii) Salary per operator per month ₹ 18,500

Marks

(b) PTX Limited is considering a change in its present credit policy. Currently it is evaluating two policies. The company is required to give a return of 20% on the investment in new accounts receivables. The company's variable costs are 70% of the selling price. Information regarding present and proposed policies are as follows : 8

	Present Policy	Policy Option 1	Policy Option 2
Annual Credit Sales (₹)	30,00,000	42,00,000	45,00,000
Debtors turnover ratio	4 times	3 times	2.4 times
Loss due to bad debts	3% of sales	5% of sales	6% of sales

Note : Return on investment in new accounts receivable is based on cost of investment in debtors.

Which option would you recommend ?

7. Answer any **four** of the following : 4×4 =16

(a) What is the meaning of Margin of Safety (MOS) ? State the relationship between Operating Leverage and Margin of Safety Ratio.

(b) Describe the steps involved in the budgetary control technique.

(c) 'Management of marketable securities is an integral part of investment of cash.' Comment.

(d) What do you mean by capital structure ? State its significance in financing decision.

(e) (i) State the main elements of leveraged lease.

(ii) State the escalation clause in contract costing.

KJN